DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-011982 Address: 333 Burma Road **Date Inspected:** 12-Feb-2010

City: Oakland, CA 94607

OSM Arrival Time: 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

CWI Name: CWI Present: Yes Li Yang No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:**

34-0006 **Bridge No: Component: OBG** Segment

Summary of Items Observed:

On this date Caltrans OSM Quality Assurance (QA) Inspector, M.Manikandan was present during the time noted above for observations relative to the work being performed.

OBG # TRIAL ASSEMBLY YARD (6BE)

This QA inspector witnessed final tension verification for Corner assembly barrier angle and cross brace (South) of Segment 6BE. Witnessed 10% on a random basis the bolts and found the tension to be in general compliance. The panel point and bolt size designations are as follows:

PP41-PP44 (Only south side)

M22 X 55 – DHGM 220001 – 443 NM

M22 X 85 – DHGM 220013 – 433 NM

M22 X 120 - DHGM 220053 - 440 NM

M24 X 60 - DHGM 240014 - 443 NM

M24 X 65 – DHGM 240008 – 547 NM

OBG # TRIAL ASSEMBLY YARD (6CE)

This QA inspector witnessed final tension verification for Corner assembly barrier angle and cross brace (South) of Segment 6CE. Witnessed 10% on a random basis the bolts and found the tension to be in general compliance. The panel point and bolt size designations are as follows:

WELDING INSPECTION REPORT

(Continued Page 2 of 3)

PP44-PP47 (Only south side) M22 X 55 - DHGM 220001 - 443 NM M22 X 85 - DHGM 220013 - 433 NM M22 X 120 - DHGM 220053 - 440 NM M24 X 60 - DHGM 240014 - 443 NM M24 X 65 - DHGM 240008 - 547 NM

OBG # TRIAL ASSEMBLY YARD

During the Quality Assurance (QA) random in-process visual inspection of T-Ribs in the OBG Trial Assembly area, this QA inspector discovered the following issues:

- -Multiple T-Rib web welds between the 7BE to 7CE (transverse splice) were misaligned across the weld joints as listed below.
- -The welds are Complete Joint Penetration (CJP) butt welds.
- -The maximum out of tolerance offset measurements across the weld per AWS D1.5 2002 is 3mm.

The weld joints are identified as:

Bottom Panel

T-Rib numbering	g from	Offset			
work point E4 (CB side)					
to E3 (BK side)					
1st T-Rib	4				
2 2nd T-Rib	7				
3rd T-Rib	6				
5th T-Rib	5				
6th T-Rib	4				
2 14th T-Rib	4				
18th T-Rib	4				
	work point E4 (CB to E3 (BK side) 1 st T-Rib 2 2nd T-Rib 3rd T-Rib 5th T-Rib 6th T-Rib 14th T-Rib	to E3 (BK side) 1			

Side Panel (Bike path Side)

Weld number	T-Rib numbering	g from	Offset
W	ork point E3 (botto	m)	
to	E1 (top)		
SP365-001-044	1st T-Rib	5	
SP365-001-048	2nd T-Rib	4	
SP365-001-052	3rd T-Rib	4	
SP365-001-056	5th T-Rib	5	
SP311-001-063	13th T-Rib	6	
SP311-001-061	14th T-Rib	5	

WELDING INSPECTION REPORT

(Continued Page 3 of 3)

SP311-001-059	15th T-Rib	6
SP311-001-057	16th T-Rib	5

For further information, please see the attached pictures below.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.





Summary of Conversations:

The incident report is issued for the above mentioned discrepancy observed in 7BE-7CE. And prior to issue it was informed to ZPMC QC and ABF QA.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact, who represents the Office of Structural Materials for your project.

Inspected By:	Manikandan, Murugan	Quality Assurance Inspector
Reviewed By:	Miller,Mark	QA Reviewer